



State of Nevada – Department Of Personnel

CLASS SPECIFICATION

<u>TITLE</u>	<u>GRADE</u>	<u>EEO-4</u>	<u>CODE</u>
PHOTOGRAPHIC LABORATORY TECHNICIAN III	30	H	9.723
PHOTOGRAPHIC LABORATORY TECHNICIAN II	28	H	9.724
PHOTOGRAPHIC LABORATORY TECHNICIAN I	27	H	9.728

SERIES CONCEPT

Incumbents in this series prepare transparent reproducibles used for drafting and designing; develop aerial film; prepare film diapositives, glass diapositives, and contact prints; enlarge, tone, rectify, and scale prints from aerial film; prepare ortho-photographic negative/positive overlays; prepare aerial continuous tone negatives, and perform related duties as required.

Consults with clients to discuss the most efficient and economical method of accomplishing projects and achieving the desired result.

Contact prints line copy on film, paper, and direct positive materials in black and white and color for use in drafting and designing. This includes reviewing the work order; selecting the proper film, cutting and pin registering the film and placing it in the vacuum frame; controlling the exposure time; exposing sensitized material; repeating the registration and exposure process for overlays; and developing exposed material in a film processor.

Prints ortho-photo composites for use for drafting and designing by utilizing a vacuum frame with a pin point light source. This includes reviewing the work order; selecting the proper film; cutting and pin registering the film and placing it in the vacuum frame; controlling the exposure time for the lights, timer and filter to achieve a uniform appearance; exposing the sensitized material; repeating the registration and exposure process for overlays; placing the ortho-photo negative and masking sheet in the vacuum frame; exposing the material; and developing exposed material in a film processor.

Prepares transparencies in accordance with the clients' specifications by measuring negatives for accurate scale; cutting and splicing the negatives; positioning and securing the negatives on a masking sheet; screening the negative to break up shadings; opaquing the negative to conceal imperfections; and exposing the negative on a vacuum frame.

Prepares records of charges which indicate the time and cost of materials for each job.

Maintains equipment in proper working order by cleaning and lubricating. Mixes developers and photographic chemicals in accordance with instructions. Orders supplies to maintain an appropriate level of inventory.

Operates other equipment to assist with duplicating section operations to include: a vertical camera, photo plate vacuum frame, whirler, duplicating copier, and diazo machine.

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CLASS CONCEPTS

PHOTOGRAPHIC LABORATORY TECHNICIAN III

Under general supervision, incumbents perform some of the duties described in the series concept but are primarily responsible for: 1) developing aerial film and preparing glass or film diapositives, duplicate film, and contact prints; 2) enlarging, toning, rectifying, and scaling controlled mosaics; or 3) preparing ortho-photographic negative/positive overlays for scaled engineering contracts and aerial continuous tone negatives. This is the advanced journey level class in the series.

Duties performed by incumbents at this level in the series include:

Develops aerial roll film for use by the photogrammetry section using an automatic film processor. This includes running a control strip and using a sensitometer and densitometer to determine film characteristics such as sensitivity to light and density; computing the amount of light intensity required to compensate for the density of the film; adjusting the solution and exposure time accordingly. Prints film or glass diapositives for use in map plotting and prepares contact prints for engineering on film and paper using an electronic variable dodging printer.

Adjusts and operates a large computerized overhead engineering camera to photograph maps, continuous tone originals, engineering drawings and printed materials to prepare ortho-photographic negative/positive overlays for scaled engineering contracts, aerial continuous tone negatives which are utilized by the cartographic section, and similar materials. This includes pin registering the negative on the copy board; determining the amount of front lighting and back lighting required, entering camera settings to control amount of reduction or enlargement and exposure time; inserting a screen in front of film to reduce copy to dots when producing negatives for halftone printing; inserting a filter in front of film to eliminate dots from copy when reshooting halftones; developing and hand processing exposed film utilizing a film processor.

Prepares enlargements of aerial negatives and as required rectifies prints to within .01 of an inch accuracy to remove photograph distortions caused by variations in axis and tilt of the airplane in relation to the ground. Enlargements are used by the photogrammetry section to prepare aerial mosaics and controlled rectified mosaics. The process to produce prints for an aerial mosaic includes: determining the density of the film and the sensitivity to light; selecting appropriate photographic paper; determining if filters are required to enhance the photograph; determining the ratio of the enlargement to the contact print; tone matching to achieve an even and sharp image; exposing the negative and paper. Additional processes are required to produce a controlled rectified mosaic which includes hand processing prints which are laid wet; calculating the amount of stretch in the paper to determine the tolerance of ratio for the next photograph; scaling three locations on the laid print which correspond to a surveyed topography sheet; preparing a transparent overlay and pin hole punched negative using these three points; manipulating the easel to which the overlay is affixed vertically and horizontally and adjusting the film ratio until the pin holes and overlay scale are in register; replacing the overlay with the photo paper; exposing the negative and paper; developing and hand processing the print.

Maintains equipment in proper working order to include: cleaning; lubricating; checking calibrations; adjusting chemicals; testing and replacing computer boards.

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CLASS CONCEPTS (cont.)

PHOTOGRAPHIC LABORATORY TECHNICIAN II

Under general supervision, incumbents perform the full range of duties described in the series concept.

This is the journey level class in the series.

PHOTOGRAPHIC LABORATORY TECHNICIAN I

Under immediate supervision; incumbents receive training in the duties outlined in the series concept in preparation for progression to Photographic Laboratory Technician II.

This is the entry level class in the series.

MINIMUM QUALIFICATIONS

PHOTOGRAPHIC LABORATORY TECHNICIAN III

EDUCATION AND EXPERIENCE:

I

Three years of experience as a Photographic Laboratory Technician II in Nevada State Service; OR

II

Three years of journey level technical experience in photographic laboratory work; OR

III

An equivalent combination of education and experience that provided the applicant with the required entry level knowledge, skills and abilities.

SPECIAL NOTE: In order to meet the needs of the division, the position may require specialized backgrounds or skills in order for the incumbent to perform all of the tasks required of the position. Any specialized background required will be identified prior to the recruitment process within the parameters of the position specification.

FULL PERFORMANCE KNOWLEDGE, SKILLS AND ABILITIES: (These may be acquired on the job and/or needed to perform the work assigned.)

Thorough knowledge of the methods, materials and equipment used in aerial photographic laboratory work. Working knowledge of halftone screens, contact screens, and use of the gray scale.

Ability to recognize the percentage of dot pattern in a halftone negative in the highlight and shadow areas of a photograph.

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MINIMUM QUALIFICATIONS (cont.)

FULL PERFORMANCE KNOWLEDGE, SKILLS AND ABILITIES: (cont.)

Skill in safely operating and maintaining photographic laboratory equipment including: a large engineering camera, enlargers, film processors, electronic variable dodging printer, photographic analyzer, and photographic sensitometer. Skill in color toning and producing controlled mosaics using triangular rectification. Skill in preparing ortho-photographic negative/ positive overlays and aerial continuous tone negatives. Skill in developing aerial film, and preparing glass diapositives, film diapositives, contact prints and enlargements.

ENTRY LEVEL KNOWLEDGE, SKILLS AND ABILITIES: (Applicants will be screened for possession of these through written, oral, performance or other evaluation procedures.)

Working knowledge of the methods, materials, and equipment used in aerial photographic laboratory work.

Ability to recognize and distinguish true color characteristics, ability to perform geometric calculations required for rectification of aerial photography. Ability to select the appropriate type of emulsion, chemistry, exposure and development to produce photographic products of the quality required. Ability to learn new photographic material techniques and to learn to operate new equipment.

In addition, knowledge, skills and abilities required at the lower levels of this series.

PHOTOGRAPHIC LABORATORY TECHNICIAN II

EDUCATION AND EXPERIENCE:

I

One year of experience equivalent to a Photographic Laboratory Technician I in Nevada State services; OR

II

An equivalent combination of education and experience that provided the applicant with the required entry level knowledge, skills and abilities.

FULL PERFORMANCE KNOWLEDGE, SKILLS AND ABILITIES: (These may be acquired on the job and/or needed to perform the work assigned.)

Working knowledge of the policies and procedures of the work unit. Working knowledge of the maintenance requirements of vacuum frame and film processors. General knowledge of the functions of the various divisions within the agency which utilize the services of the photographic laboratory. General knowledge of the methods, materials, and equipment used in halftone, continuous tone and composite photography; aerial film development, enlargement, and contact printing.

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MINIMUM QUALIFICATIONS (cont.)

FULL PERFORMANCE KNOWLEDGE, SKILLS AND ABILITIES: (cont.)

Ability to work independently and follow through on assignments with minimal direction. Ability to establish priorities and complete assignments within the required time frame.

Skill in preparing high quality blackline prints, transparencies, line work composites, and ortho-photo composites.

ENTRY LEVEL KNOWLEDGE, SKILLS AND ABILITIES: (Applicants will be screened for possession of these through written, oral, performance or other evaluation procedures.)

Working knowledge of methods, materials, and equipment used in contact printing, film developing and processing. ENTRY LEVEL KNOWLEDGE, SKILLS AND ABILITIES: (cont.)

Skill in safely operating and maintaining vacuum frames (diffused light and pin point light source); film processor; whirler; plate maker; and dry print machine; camera.

In addition, knowledge, skills and abilities required at the lower levels of this series.

PHOTOGRAPHIC LABORATORY TECHNICIAN I

EDUCATION AND EXPERIENCE:

I

Two years of journey level technical experience in operating and adjusting process cameras; film processors, and contact printers; OR

II

Two years of experience equivalent to an Offset Machine Operator II or Camera/Plate Processing Technician in Nevada State Service; OR

III

An equivalent combination of education and experience that provided the applicant with the required entry level knowledge, skills and abilities.

FULL PERFORMANCE KNOWLEDGE, SKILLS AND ABILITIES: (These may be acquired on the job and/or needed to perform the work assigned.)

General knowledge of the methods, materials, and equipment used in contact printing, film developing and processing. General knowledge of the maintenance requirements of vacuum frames and film processors. Working knowledge of safety hazards and safe working procedures. General knowledge of the policies and procedures of the work unit.

Ability to work in a confined dark area for extended periods of time. Ability to establish and maintain effective working relationships with co-workers and agency staff.

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MINIMUM QUALIFICATIONS (cont.)

ENTRY LEVEL KNOWLEDGE, SKILLS AND ABILITIES: (Applicants will be screened for possession of these through written, oral, performance or other evaluation procedures.)

Working knowledge of the methods, materials, and equipment used in process camera work. General knowledge of safety hazards, safe working procedures and proper disposal of hazardous materials.

Ability to read sufficient to and interpret work orders, equipment manuals, and technical publications. Ability to write sufficient to prepare supply requisitions, and billing records. Ability to communicate effectively with co-workers and agency staff. Ability to perform basic mathematical calculations to lay out and set up jobs.

This class specification is used for classification, recruitment and examination purposes. It is not to be considered a substitute for work performance standards for positions assigned to this class.

ESTABLISHED:	<u>9.723</u> 1/1/61	<u>9.724</u> 11/8/73	<u>9.728</u> 7/1/91P 11/29/90PC
REVISED:	4/1/67	4/11/79R 7/18/80PAC	
REVISED:	7/18/89	12/19/85-12	
REVISED:	12/19/85-12	7/1/89P 9/27/88PC	
REVISED:	7/1/89P 9/27/88PC 7/1/91P 11/29/90PC	7/1/91P 11/29/90PC	